

NORTON MAGNETIC HEADS

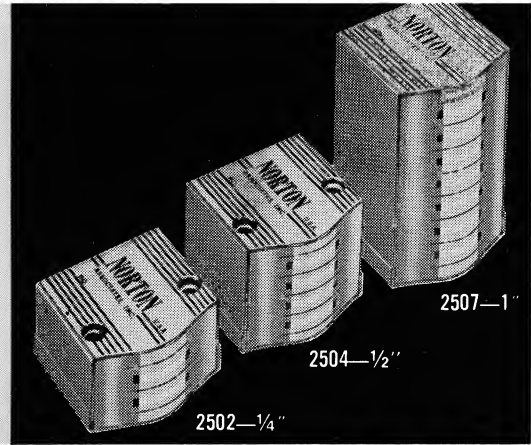
SERIES 2500

CROSSTALK — 60 DB

Track Width—.050 — Track Spacing—.140 ctoc

| INDUCTANCE mh | MAXIMUM RATING AT 75°C ma rms | TYPICAL OPERATION | | | |
|------------------|----------------------------------------|-------------------|------------------|-------------------------|----------------------------|
| | | RECORD WITH BIAS | | RECORD W/O BIAS | |
| | | BIAS ma rms | RECORD ma rms | PLAYBACK 0 DB mv rms | RECORD 0 DB ma pk to pk |
| 4 | 20 | 4.0 | .50 | 1.0 | 10. |
| 15 | 10 | 2.0 | .25 | | 5.0 |
| 60 | 5 | 1.0 | .12 | | 2.5 |
| 250 | 2.5 | .5 | .06 | | 1.3 |

| NUMBER OF TRACKS | TAPE WIDTH | CATALOG NUMBER | | |
|---------------------|---------------|----------------|------------------|-------------|
| | | SERIES | INDUCTANCE | FUNCTION |
| 2 | 1/4" | 2502 | 4, 15, 60 or 250 | R, R/P or P |
| 3 | 1/2" | 2503 | | |
| 4 | 1/2" | 2504 | | |
| 7 | 1" | 2507 | | |



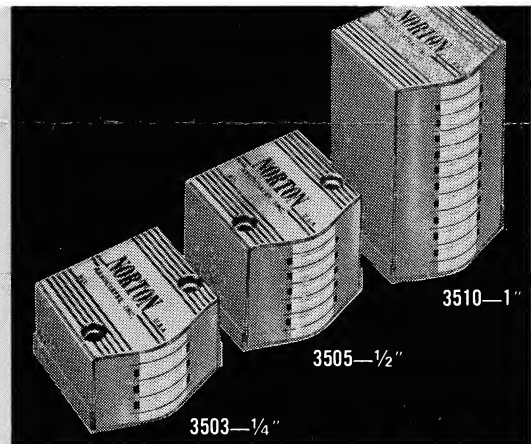
SERIES 3500

CROSSTALK — 60 DB

Track Width—.040 — Track Spacing—.100 ctoc

| INDUCTANCE mh | MAXIMUM RATING AT 75°C ma rms | TYPICAL OPERATION | | | |
|------------------|----------------------------------------|-------------------|------------------|-------------------------|----------------------------|
| | | RECORD WITH BIAS | | RECORD W/O BIAS | |
| | | BIAS ma rms | RECORD ma rms | PLAYBACK 0 DB mv rms | RECORD 0 DB ma pk to pk |
| 4 | 20 | 3.5 | .45 | 0.9 | 9.0 |
| 15 | 10 | 1.7 | .22 | | 4.5 |
| 60 | 5 | .9 | .11 | | 2.3 |
| 250 | 2.5 | .45 | .06 | | 1.2 |

| NUMBER OF TRACKS | TAPE WIDTH | CATALOG NUMBER | | |
|---------------------|---------------|----------------|------------------|-------------|
| | | SERIES | INDUCTANCE | FUNCTION |
| 3 | 1/4" | 3503 | 4, 15, 60 or 250 | R, R/P or P |
| 5 | 1/2" | 3505 | | |
| 10 | 1" | 3510 | | |



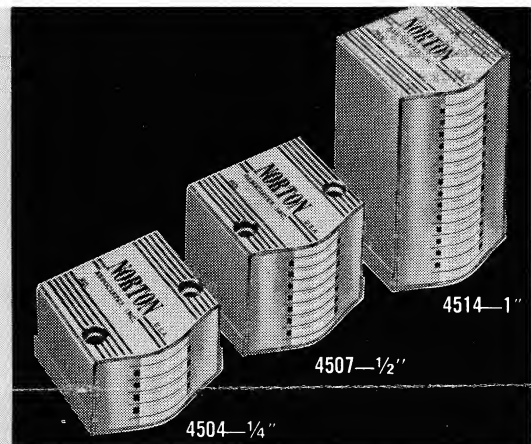
SERIES 4500

CROSSTALK — 50 DB

Track Width—.032 — Track Spacing—.070 ctoc

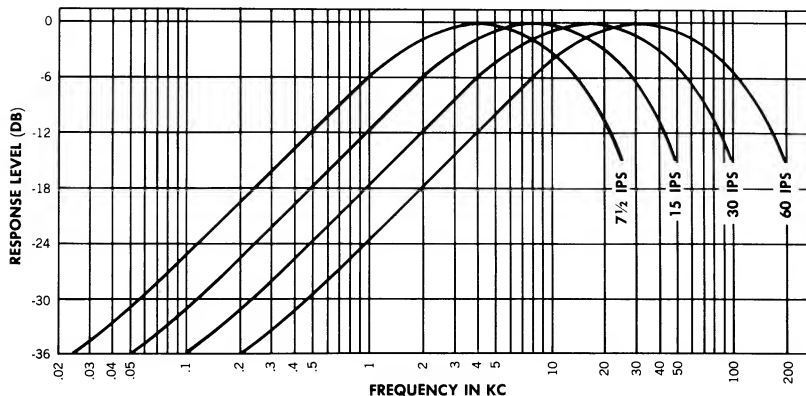
| INDUCTANCE mh | MAXIMUM RATING AT 75°C ma rms | TYPICAL OPERATION | | | |
|------------------|----------------------------------------|-------------------|------------------|-------------------------|----------------------------|
| | | RECORD WITH BIAS | | RECORD W/O BIAS | |
| | | BIAS ma rms | RECORD ma rms | PLAYBACK 0 DB mv rms | RECORD 0 DB ma pk to pk |
| 4 | 16 | 3.0 | .4 | 0.8 | 8.0 |
| 15 | 8 | 1.5 | .2 | | 4.0 |
| 60 | 4 | .8 | .1 | | 2.0 |
| 250 | 2 | .4 | .05 | | 1.0 |

| NUMBER OF TRACKS | TAPE WIDTH | CATALOG NUMBER | | |
|---------------------|---------------|----------------|------------------|-------------|
| | | SERIES | INDUCTANCE | FUNCTION |
| 4 | 1/4" | 4504 | 4, 15, 60 or 250 | R, R/P or P |
| 7 | 1/2" | 4507 | | |
| 14 | 1" | 4514 | | |



RESPONSE/FREQUENCY CHARACTERISTIC, FREQUENCY RANGE & LEVEL DATA

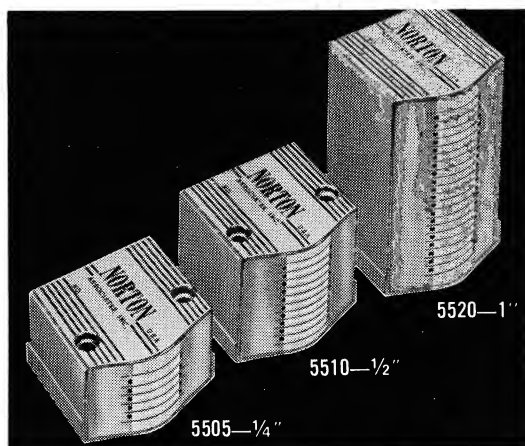
Unequalized playback, constant current recording vs tape speed and impedance.



| Inductance mh | Impedance @ 1 KC K | Recommended Max. Freq. KC | Response Level (DB) At Other Tape Speeds (IPS) | | | |
|------------------|--------------------------|---------------------------------|---------------------------------------------------|-----|-----|-----|
| | | | 7 1/2 | 15 | 30 | 60 |
| 4 | .03 | 400 | -18 | -12 | -6 | 0* |
| 15 | .1 | 200 | -12 | -6 | 0* | +6 |
| 60 | .4 | 100 | -6 | 0* | +6 | +12 |
| 250 | 1.6 | 60 | 0* | +6 | +12 | +18 |

*shown on chart (on 3M 459 tape or equal)

The Response/Frequency Characteristic shown, together with the record and play data specified for each Series above illustrates the exceptional performance capabilities of these miniature high performance magnetic heads. High output at short wave lengths together with a maximum contour effect deviation of ± 2 DB from the 6 DB/octave slope at long wave lengths provides a useful bandwidth of over 6 octaves at any tape speed.



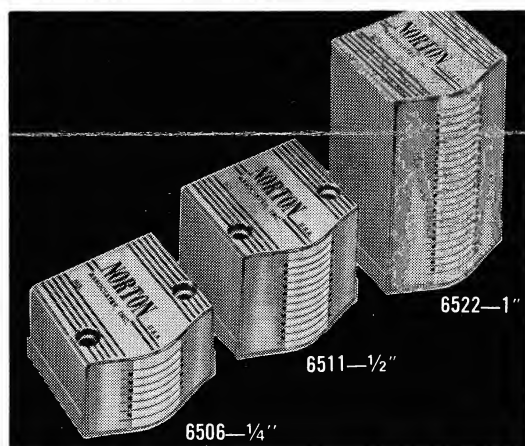
CROSSTALK — 40 DB

SERIES 5500

Track Width—.025 — Track Spacing—.050 ctoc

| INDUCTANCE mh | MAXIMUM RATING AT 75°C ma rms | TYPICAL OPERATION | | | | |
|------------------|----------------------------------------|-------------------|------------------|-------------------------|-----------------------|------------------------------|
| | | RECORD WITH BIAS | | | RECORD W/O BIAS | |
| | | BIAS ma rms | RECORD ma rms | PLAYBACK 0 DB mv rms | RECORD ma pk to pk | PLAYBACK 0 DB mv pk to pk |
| 4 | 14 | 2.8 | .35 | 0.7 | 7.0 | 3.5 |
| 15 | 7 | 1.4 | .18 | | 3.5 | |
| 60 | 3.5 | .7 | .09 | | 1.8 | |
| 250 | 2 | .35 | .045 | | .9 | |

| NUMBER OF TRACKS | TAPE WIDTH | CATALOG NUMBER | | |
|---------------------|---------------|----------------|------------------|-------------|
| | | SERIES | INDUCTANCE | FUNCTION |
| 5 | 1/4" | 5505 | 4, 15, 60 or 250 | R, R/P or P |
| 10 | 1/2" | 5510 | | |
| 20 | 1" | 5520 | | |



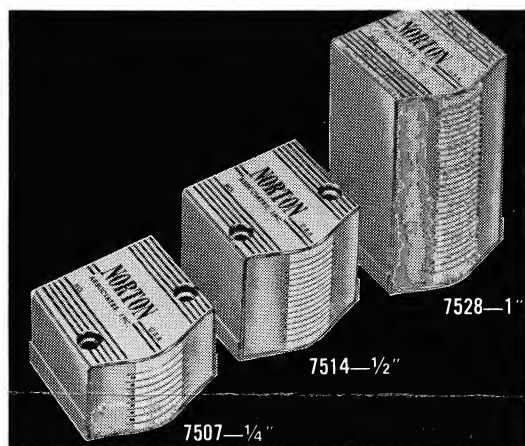
CROSSTALK — 40 DB

SERIES 6500

Track Width—.018 — Track Spacing—.045 ctoc

| INDUCTANCE mh | MAXIMUM RATING AT 75°C ma rms | TYPICAL OPERATION | | | | |
|------------------|----------------------------------------|-------------------|------------------|-------------------------|-----------------------|------------------------------|
| | | RECORD WITH BIAS | | | RECORD W/O BIAS | |
| | | BIAS ma rms | RECORD ma rms | PLAYBACK 0 DB mv rms | RECORD ma pk to pk | PLAYBACK 0 DB mv pk to pk |
| 4 | 12 | 2.5 | .30 | 0.6 | 6.0 | 3.0 |
| 15 | 6 | 1.2 | .15 | | 3.0 | |
| 60 | 3 | .6 | .08 | | 1.5 | |
| 250 | 2 | .3 | .04 | | .8 | |

| NUMBER OF TRACKS | TAPE WIDTH | CATALOG NUMBER | | |
|---------------------|---------------|----------------|------------------|-------------|
| | | SERIES | INDUCTANCE | FUNCTION |
| 6 | 1/4" | 6506 | 4, 15, 60 or 250 | R, R/P or P |
| 11 | 1/2" | 6511 | | |
| 22 | 1" | 6522 | | |



CROSSTALK — 40 DB

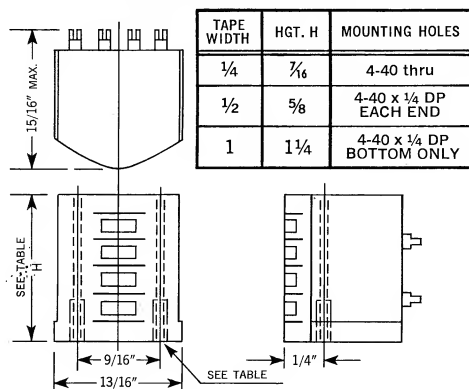
SERIES 7500

Track Width—.012 — Track Spacing 7507 — .038 ctoc
7514, 7528 — .036 ctoc

| INDUCTANCE mh | MAXIMUM RATING AT 75°C ma rms | TYPICAL OPERATION | | | | |
|------------------|----------------------------------------|-------------------|------------------|-------------------------|-----------------------|------------------------------|
| | | RECORD WITH BIAS | | | RECORD W/O BIAS | |
| | | BIAS ma rms | RECORD ma rms | PLAYBACK 0 DB mv rms | RECORD ma pk to pk | PLAYBACK 0 DB mv pk to pk |
| 4 | 10 | 2.0 | .25 | 0.5 | 5.0 | 2.5 |
| 15 | 5 | 1.0 | .12 | | 2.5 | |
| 60 | 2.5 | .5 | .06 | | 1.2 | |
| 250 | 1.5 | .25 | .03 | | .6 | |

| NUMBER OF TRACKS | TAPE WIDTH | CATALOG NUMBER | | |
|---------------------|---------------|----------------|------------------|-------------|
| | | SERIES | INDUCTANCE | FUNCTION |
| 7 | 1/4" | 7507 | 4, 15, 60 or 250 | R, R/P or P |
| 14 | 1/2" | 7514 | | |
| 28 | 1" | 7528 | | |

OUTLINE & MOUNTING DIMENSIONS SERIES 2500 THRU 7500



STANDARD FEATURES include extremely low crosstalk ratings and +75°C temperature operation without derating. Rugged solid metal construction, shock and vibration resistant, provides a hard, stable, low friction, long wear surface for the tape. The cores, shields and all metallic members are mechanically and electrically bonded together for effective electrostatic shielding and grounding of static charges. Precision finishing of the recording face to micro-inch tolerance insures intimate contact of the tape with every channel for uniformly excellent response independent of track location. The rear terminal board carries two terminals per track.

To specify the complete catalog number for ordering purposes designate the Series number of the head you require, the inductance in mh and the function ie. Record only, Record/Play, or Play only, as in the following example: Catalog #4507-15P which is the Series 4500, 7 track, 15mh Play Head for 1/2" tape.

NORTON ASSOCIATES, INC.
240 OLD COUNTRY RD., HICKSVILLE, N. Y. • 516-OV 1-6181